

REMARKS

Claims 1-9 remain pending in the present application. Claims 1 and 3 have been amended. Claims 5-9 are new. Basis for the amendments and new claims can be found throughout the specification, claims and drawings originally filed.

REJECTION UNDER 35 U.S.C. § 102

Claims 1-4 are rejected under 35 U.S.C. § 102(b) as being anticipated by Iritani, et al.

Claim 1 of the present application has been amended to define that the control unit gradually decreases the air conditioning capacity from a maximum capacity to a minimum capacity as the speed of the engine decreases. This is shown in the graph of step S802 in Figure 7 of the present invention.

Iritani, et al. indicates and describes the relationship between the air conditioning capacity UEPB and the engine rotational speed R as in Col. 2, lines 30-67, and the graph at S843 in FIG. 11. However, Iritani et al neither teaches nor suggests a relationship that the air conditioning capacity of the air conditioning unit is gradually decreased from a maximum air conditioning capacity to a minimum air conditioning capacity as the rotation speed R of the engine decreases. That is, Iritani et al only turns on or off the air conditioning at the rotation speed of 1000 rpm, Iritani, et al. does not gradually change the capacity.

As shown in the graph at step S843 in FIG. 11 of Iritani et al, the air conditioning capacity UEPB is decreased in a single step, is not decreased gradually.

Regarding Claim 3, Iritani, et al. does not describe or suggest means for calculating a power generation efficiency of the engine nor does it teach or suggest a relationship between the power generating efficiency and the air-conditioning capacity.

Claim 1 of the present application has been amended. In amended claim 1 of the present application, the control unit gradually decreases the air conditioning capacity of the air conditioning unit from a maximum air conditioning capacity to a minimum air conditioning capacity as the rotation speed of the engine decreases from a first predetermined rotation speed to a second predetermined rotation speed that is smaller than the first predetermined rotation speed. This description is supported at step S802 in FIG. 7 of the present application. Accordingly, it can prevent the air conditioning capacity from being rapidly changed at one engine rotation speed, and comfortable air conditioning can be provided.

Claim 3 of the present application has been amended to clearly define that the control unit includes means for calculating a power generation efficiency.

Thus, Applicant believes Claims 1 and 3, as amended, patentably distinguish over the art of record. Likewise, Claims 2 and 4, which depend from Claims 1 and 3, respectively, are also believed to patentably distinguish over the art of record. Reconsideration of the rejection is respectfully requested.

NEW CLAIMS

New dependent claim 5 of the present application defines that the control unit gradually decreases the air conditioning capacity from a maximum air conditioning capacity to a minimum air conditioning capacity as the power generation efficiency for

the engine decreases from the predetermined rotation speed. This limitation is supported in the graph at step S802 in FIG. 8.

In new claim 6 - 9 of the present application, when the rotation speed of the engine (or power generation efficiency due to the engine) is lower than a predetermined rotation speed (or predetermined efficiency), the control unit sets the air conditioning unit to a first air conditioning capacity; and when the rotation speed of the engine (or power generation efficiency due to the engine) is greater than the predetermined rotation speed (or predetermined efficiency), the control unit sets the air conditioning unit to a second air conditioning capacity, the second air conditioning capacity always being greater than the first air conditioning capacity. As illustrated in step S843 of Iritani, et al., when the engine speed exceeds 2000 rpm, the UEPB of the air conditioning system is reduced between 2000 and 3000 rpm and thus the second air conditioning capacity in Iritani, et al. is not always greater than the first air conditioning capacity as defined in Claims 6 and 9.

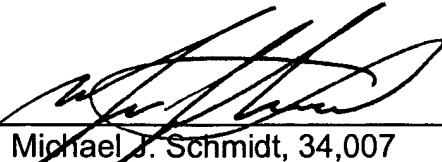
CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the

Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

By:


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AMENDMENTS TO THE DRAWINGS

The attached "Replacement Sheets" of drawings include changes to Figures 7 and 8. The attached "Replacement Sheets," which include Figures 7 and 8, replace the original sheets including Figures 7 and 8.

Figures 7 and 8, in step S801, please change the word "CHANGING" to "CHARGING".

Attachment: Replacement Sheets